

## Abstract

The present invention is directed to an camera, an imaging system and an illumination sensor which all corrects colors of taken images of objects at practical speed and displays the image colors correctly. The invention comprises an imaging device for taking a color image and a lens, and a reflection surface is provided within the maximum field of view to diffuse-reflect an image of an object so that it impinges upon the imaging device through the lens. Each main coordinates of a direct image obtained as an object point on the object is imaged on the imaging device is assigned to corresponding sub-coordinates of an indirect image of the object point formed from the reflection surface on the imaging device. The R, G, B components in pixels at the individual main coordinates are respectively divided by the same components at the corresponding sub-coordinates to provide a color-corrected image.